



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MF

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/220,016 12/23/98 HOMAN

A 77682-7

TM02/0312

SMART AND BIGGAR
55 METCALFE STREET SUITE 900
P O BOX 2999 STATION D
OTTAWA ON K1P 5Y6
CANADA

EXAMINER

APPIAH, C

ART UNIT

PAPER NUMBER

2682

5

DATE MAILED:

03/12/01

AIR MAIL

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

48

Office Action Summary

Application No.
09/220,016

Applicant(s)
Homan et al.

Examiner
Charles Appiah

Group Art Unit
2682



☒ Responsive to communication(s) filed on Dec 21, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1035 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 27-38 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 27-38 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2682

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 27-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 27, 28, 30, 32 and 37 are rejected under 35 U.S.C. 102(e) as being anticipated by **Shirai (6,104,924)**.

With respect to claims 27 and 32 Shirai discloses a wireless terminal method and a wireless terminal comprising:

providing a memory on the wireless terminal which in an on-line mode is adapted to be treated as a local virtual memory by an application program running on a server to read and write data in the virtual memory related to the remote application program (“... fixed station supplies to the mobile station the appropriate scripts which the mobile station is capable of utilizing, the mobile station stores the supplied scripts in its memory”, col. 5, lines 5-9), and

Shirai's teaching of “operating the mobile station in accordance with the stored at least one script and receiving a user input to aid in configuring the operating features of the mobile station to

Art Unit: 2682

select and implement at least one specific capability indicated in the terminal capabilities response without further contact with the fixed station”, (col. 6, lines 46-51), reads on providing a local application program on the wireless terminal which in an off-line mode has read and write access to the data in the virtual memory.

With respect to claim 28, Shirai further inherently teaches the wireless terminal downloading the local application program while in the on-line mode (“... downloading of the SMS-VT scripts from the fixed station to the mobile station . . .”, col. 4, lines 53-64).

With respect to claims 30 and 37 Shirai discloses a server method and a server, comprising: providing an application program running on the server (see col. 5, lines 4-6), the application program treating as local virtual memory a memory located on a wireless terminal while a connection between the server and the wireless terminal is established (“... fixed station supplies to the mobile station the appropriate scripts which the mobile station is capable of utilizing, the mobile station stores the supplied scripts in its memory”, col. 5, lines 5-9, col. 5, lines 53-56), while the connection is established and without wireless user intervention, sending to the wireless terminal a local application program which when run by the wireless terminal allows the wireless terminal read and write access to data in the memory related to the application program while in an off-line mode (“operating the mobile station in accordance with the stored at least one script and receiving a user input to aid in configuring the operating features of the mobile station to select and implement at least one specific capability indicated in the terminal capabilities response without further contact with the fixed station”, col. 6, lines 46-51).

Art Unit: 2682

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 29, 31, 34 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Shirai** as applied to claims 30 and 37 above, and further in view of **Helferich (6,087,956)**.

With respect to claims 29 and 34 Shirai further discloses configuring the operating features of the mobile station to select and implement at least one specific capability indicated in the terminal capabilities response without further contact with the fixed station (col. 6, lines 48-51), thus suggesting the capability of the mobile station to modify particular data in the virtual memory while in the off-line mode, but fails to specifically disclose outputting a message to the server containing updates for at least some of the particular data. Helferich discloses a system for selectively controlling information stored in paging transceivers that include erasing information in the transceiver and the capability of erasing corresponding remotely stored information by a server (see col. 14, lines 1-39). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Helferich with the system of Shirai for the benefit of controlling and managing memory space usage through control of the number and size of data transmissions without sacrificing quality of service to the user.

With respect to claims 31 and 38 Shirai's disclosure of the fixed station supplying the mobile station the appropriate scripts which the mobile station is capable of utilizing and which is stored in the memory of the mobile station (see col. 5, lines 6-9), reads on maintaining a mirror

Art Unit: 2682

version of the local virtual memory in the server while the feature of configuring the operating features of the mobile to select and implement at least one specific capability indicated in the terminal capabilities response without further contact (col. 6, lines 46-51), reads on the local program modifying particular data in the virtual memory while in the off-line mode. Shirai however, fails to specifically disclose receiving a message containing updates for at least some of the particular data and updating the mirror version accordingly. Helferich discloses a system for selectively controlling information stored in paging transceivers that include erasing information in the transceiver and the capability of erasing corresponding remotely stored information by a server (see col. 14, lines 1-39). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Helferich with the system of Shirai for the benefit of controlling and managing memory space usage through control of the number and size of data transmissions without sacrificing quality of service to the user.

6. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable **Shirai (6,104,924)** over as applied to claim 32 above, and further in view of **Overy et al. (6,122,530)**.

Regarding claim 35 Shirai further suggests softkeys having labels that can be customized (see col. 4, lines 11-16), but fails to specifically disclose a plurality of keys having dynamically redefinable functions wherein the local application program specifies softkey labels identifying a respective function defined by the application program for at least one of the keys, the local application program also comprising the functions defined for the at least one of the keys. The use of reconfigurable or programmable keys or buttons on communication terminals is very well

Art Unit: 2682

known in the art as taught for example by Overy. Overy discloses a radiotelephone with reconfigurable softkeys which have different associated functions dependent upon the operating state of the radiotelephone (see col. 3, line 25 to col. 4, line 25). It would therefore have been obvious to one of ordinary skill in the art, at the time of the invention to incorporate the above teaching of Overy into the system of Shirai for the benefit of providing a user with an easy to use and simple means of programming a communication device to perform functions according to the user's desire.

With respect to claim 36, Shirai further discloses that the local functions comprise at least one function which can operate completely independently of any connection with the server (see col. 5, lines 18-22), and the at least one function which when executed instigates the establishment of a new connection to the server if one is not already in existence (feature of origination of SMS transmissions to the fixed station, col. 5, lines 31-41).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clise et al. (5,797,091) discloses a personal communication system with reconfigurable function keys.

Kuehneman et al. (4,688,020) discloses a reconfigurable keyboard.

Chavez, Jr. et al. (6,125,285) discloses a wireless handset with programmable buttons

Buisson et al. (4,844,637) discloses a keyboard with alterable configuration.

Art Unit: 2682

Perdomo (6,118,995) discloses a method for updating a function value of a subscriber unit.

Andrews (5,911,121) discloses a method for automatically configuring a control program for a mobile telephone.

Johansson et al. (5,418,837) discloses a method for upgrading cellular mobile telephones.

Halonen (5,887,254) discloses a system for updating the software in a mobile telephone using the air interface.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is (703) 305-4772. The examiner can normally be reached on M-F from 7:30AM to 5:00PM.

Art Unit: 2682


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chang, can be reached on (703) 308-6739.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700. The Group fax numbers are (703) 308-6306 and (703) 308-6296.

Serial Number: 09/220,016

CA
Charles Appiah

March 9, 2001.


VIVIAN CHANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600